

Keynotes

May-June 2001

Atlantic Oceanographic and Meteorological Laboratory

Volume 5, Number 5-6

AOML Reorganizes Research Divisions

AOML has reorganized its regional and remote sensing activities with a view to bringing similar types of work being performed in two of its research divisions into one unit and, simultaneously, allowing some personnel development for general Laboratory needs.

The Remote Sensing Division has been dissolved, in part resurfacing as the Acoustics Group housed within the Ocean Chemistry Division and directed by Dr. John Proni. The Acoustics Group will include Joseph Bishop, Jules Craynock, and Jack Stamates. Dr. David Palmer and Paul Dammann, formerly with the Remote Sensing Division, have also been transferred to the Ocean Chemistry Division.

The Physical Oceanography Division's Engineering Group, under the direction of David Bitterman, has been augmented by the addition of Ulises Rivero, an electrical engineer. The Computer Networks and Services Division has also been augmented by the transfer of Alejandra Lorenzo, a computer specialist, and Evan Forde, an oceanographer. Among other duties, Alejandra and Evan will oversee the AOML presence on the World-Wide Web. Carla Stephens, administrative assistant, will divide her time between the Office of the Director and the Physical Oceanography Division.

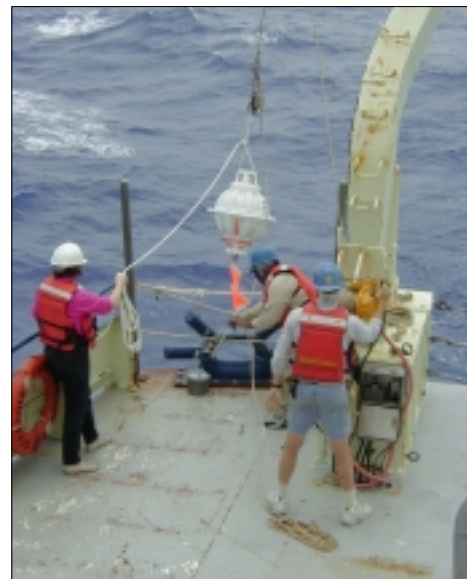


Scientists Monitor Deep Western Boundary Current

Lead principal investigator Molly Baringer of AOML's Physical Oceanography Division, Sonia Bauer and Alison Macdonald of the University of Miami's Cooperative Institute of Marine and Atmospheric Studies, comprised the scientific team on a recent research cruise aboard the R/V *Oceanus*. During their two weeks at sea, the scientists gathered CTD (conductivity-temperature-depth) and LADCP (lowered acoustic Doppler current profiler) samples in the Straits of Florida, Northwest Providence Channel, and off Abaco Island, Bahamas. In addition, the team deployed four inverted echo sounder (IES) instruments in the Straits of Florida that will collect dynamic height time series data for the next two years. The IES deployments are part of an ongoing effort to monitor the Deep Western Boundary Current (DWBC). Also participating in the cruise was undergraduate student Rosette Fernandez of the Marine Advanced Technology Education (MATE) Center. Technical support for the scientific team was provided by AOML's David Bitterman, Robert Roddy, and Douglas Anderson.

The Straits of Florida and Abaco time series of the DWBC began in August 1984 when NOAA's Subtropical Atlantic Climate Study (STACS) program extended its Straits of Florida program to include measurements of western boundary current transports and watermass properties east of Abaco, the Bahamas. Since 1986, over 20 hydrographic sections have been completed east of Abaco, most including direct velocity observations. Transient tracer (CFC) measurements have been made on seven of these sections, at roughly two-year intervals. Current meter arrays have been maintained nearly continuously for an 11-year period from April 1986 through May 1997.

Data from the Abaco time series are helping to determine watermass and transport signatures related to changes in the strength and location of high latitude watermass formation in the North Atlantic. Monitoring watermass properties in the DWBC at key locations such as Abaco is one part of an effort to track decadal changes in large-scale watermass properties, which is a fundamental scientific goal in the international Climate Variability and Predictability Program (CLIVAR). Through this effort, researchers hope to acquire the ability to determine the magnitude of the thermocline circulation and monitor abrupt climate changes.



Lead scientist Molly Baringer (left) deploys an inverted echo sounder in the Straits of Florida with the assistance of R/V *Oceanus* personnel.



AOML is a research laboratory of NOAA's Office of Oceanic and Atmospheric Research located on Virginia Key in Miami, Florida



NOAA Forecasts “Average” Atlantic Hurricane Season

NOAA scientists released their forecast for the 2001 Atlantic hurricane season on May 21st, stating that an anticipated average level of overall activity would likely result in fewer storms in comparison to the past three hurricane seasons. Speaking at a news conference in Washington, D.C., scientists from NOAA’s National Hurricane Center, Tropical Prediction Center, and Hurricane Research Division (of AOML) cited the absence of strong La Niña conditions as a dominant factor in their forecast.



The June 1-November 30th season is expected to produce eight to 11 tropical storms, of which five to seven will reach hurricane strength, with two to three classified as being “major.” Major storms typically pack sustained winds of at least 110 mph and are classified at the category 3 level on the Saffir-Simpson Scale. The majority of tropical storm and hurricane activity is expected to occur during the months of August-October, considered the peak of the hurricane season. NOAA forecasters will issue an updated hurricane outlook in August.

Residents of hurricane-prone areas were advised not to become complacent with the announcement of an “average” season, pointing out that average hurricane seasons typically produce one to two landfalling hurricanes in the United States and one in the Caribbean.

Atlantic Basin Year 2001 Storm Names

Allison	Lorenzo
Barry	Michelle
Chantal	Noel
Dean	Olga
Erin	Pablo
Felix	Rebekah
Gabrielle	Sebastian
Humberto	Tanya
Iris	Van
Jerry	Wendy
Karen	

Ocean Temperatures Linked to South Florida Long-Term Flood/Drought Cycles

In the coming decades, droughts may be less frequent in Florida according to a study by scientists from AOML’s Physical Oceanography Division and the South Florida Water Management District (SFWMD). David Enfield and Alberto Mestas-Núñez of AOML and Paul Trimble of the SFWMD examined North Atlantic Ocean sea surface temperature shifts between warm and cool phases that lasted two to four decades each. The results of their research, published in the May 15th issue of *Geophysical Research Letters*, links the slow, multi-decadal changes in North Atlantic temperatures to North American rainfall and river flows (Enfield, D.B., A.M. Mestas-Núñez, and P.J. Trimble: The Atlantic Multidecadal Oscillation and its relationship to rainfall and river flows in the continental U.S. *Geophys. Res. Lett.*, 28(10):2077-2080, 2001).

According to the scientists, central and south Florida receive more rainfall during multi-year periods when the North Atlantic is warm. For example, a 10-year average inflow to Lake Okeechobee during warm phases is 40% greater than for cool phases. For most of the past 30 years, the North Atlantic has been cool and Florida has had less rainfall. Current data suggest that a transition to warm conditions is under way. The result may be less frequent droughts in Florida, but more frequent flooding.

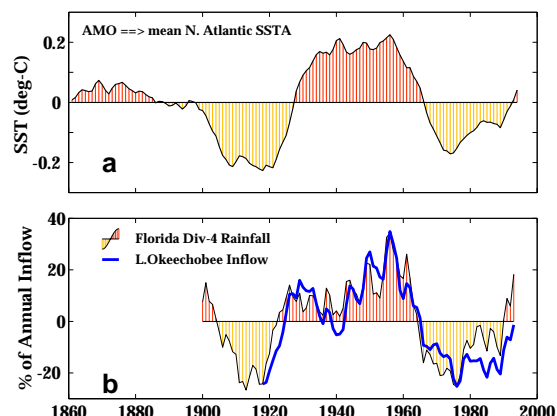
By adapting water management strategies to this North Atlantic climate pattern, water managers hope to better meet the competing objectives of flood control, water supply, and environmental enhancement. “Southern Florida’s natural ecosystems benefit greatly from this newly found relationship,” said Paul Trimble. “Climate variability affects the evolution and needs of the natural systems that depend on water availability. Understanding these climate factors will allow us to make operating decisions on flood protection and water supply sooner and less abruptly. This will help us manage south Florida’s precious natural ecosystems in a less intrusive, more friendly manner.”

“As North Atlantic temperatures rise, the increased rainfall may take the form of fewer droughts and/or more frequent flooding, although occasional droughts may still occur. Such extreme events can be likened to the effects of occasional large waves that alternately crash on a beach at different phases of the tide,” said David Enfield. “Storm waves are less likely to produce damage during low tide than during high tide, but some damage will still occur.”

The observed link between temperatures and wet and dry cycles is but a general indicator and does not take into consideration issues such as global warming or changing land use. As Enfield warns, “We can only make these projections based on a natural cycle observed in the past when land use and development pressures were much less. We may now be entering an era so affected by human changes that the natural cycle will be swamped.”

This collaborative research between AOML and the SFWMD has resulted in greater understanding of the role climate variability plays in regional water management decisions and the potential benefits possible from improved seasonal to multi-seasonal climate forecasts. This new perspective of the application of climate forecasts will allow the results of research to be used more effectively on future water management strategies.

Official NOAA press release of April 4, 2001 (Contact: Jana Goldman, Jana.Goldman@noaa.gov or 301-713-2483).



(a) The AMO index, calculated as the ten-year running mean of linearly detrended Atlantic SST anomaly north of the equator. (b) Ten-year running means (all seasons) of Lake Okeechobee inflow (solid curve) expressed as a percentage of the long term annual mean, and of the Florida division 4 rainfall (shaded departures), rescaled to the outflow.

Ethics Training

June 8, 2001

2:00 p.m.

AOML First-Floor Conference Room

Department of Commerce
Employees are encouraged
to attend

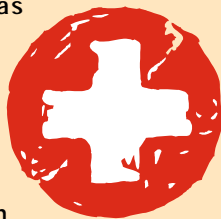
Topics covered will include:

- conflict of interest statutes
- accepting gifts
- outside employment
- lobbying the government
- political activities
- seeking employment
- post-employment rules

contact Doug Mullen for
more information

(202) 482-8042
dmullen@doc.gov

AOML has recently obtained an Automatic External Defibrillator (AED) which has been mounted on the stairwell to the right of the Receptionist's station in the lobby. An AED can greatly improve the chances of survival following a heart attack. In the event of a medical emergency, call for help immediately (9-911). Laboratory personnel trained in First Aid, CPR, and the AED can provide assistance in the interim until emergency personnel arrive. A list of contact individuals trained in CPR/AED will be placed inside the AED carrying case. Only individuals who have received adult CPR/AED training are authorized to use the AED. Joseph Pica will be the main point of contact for the AED.



Mission Impossible: The Merchant Ship

Molly Baringer, Oceanographer,
Physical Oceanography Division

Tuesday, May 8th, 7:38 a.m.: Anne-Marie Wilburn was heading to work on Kendall Drive, humming quietly to herself. She pushed the cassette tape into the tape player and heard: "Good morning, Ms. Wilburn. AOML has been deploying expendable bathythermographs (XBTs) from volunteer merchant vessels throughout the Atlantic, Pacific, and Indian Oceans for more than a decade. Recently, the shipping industry has undergone substantial reorganization. In particular, it has become increasingly difficult to find ships for the XBT line between the Mediterranean and Miami. We have just been notified by Billy Molero from Americana Ships that the ship originally scheduled for the June 2001 high density XBT transit line, the TMM Veracruz, will be available in three days. All personnel and gear must be in Europe on board ship by May 11th. Should you miss this deadline, it may be months before another ship can be found.

"Your mission, should you decide to accept it, is to locate a merchant ship that will agree to carry science personnel, hire a shipping agent in either Italy or Spain that can work on short notice, assign personnel, and ship 1200 pounds of equipment contained within 30 boxes. You must accomplish these objectives within 72 hours. As always, should you or any of your GOOS force be caught or disappear, the GOOS office will disavow any knowledge of your actions. This tape will self destruct in five seconds. Good luck, Ms. Wilburn."

Wasting no time, Anne-Marie hurried to work and quickly assembled her GOOS special forces team. Jim Farrington flew in from Norfolk, Virginia, to join the mission. Calculating the time difference, he contacted the captain of the Veracruz (3:00 a.m. Miami time) in Italy and obtained the name of the ship's agent in Spain. Anne-Marie contacted the ship's agent while Jim gathered quotes from several shipping companies and airlines. Robert Roddy sorted and packed the equipment. Anne-Marie and Craig Engler rushed to measure the size of the boxes and their weight. Quickly, they shrink-wrapped the boxes and delivered them to the airline. Jim made the flight to Barcelona, Spain. The ship's agent gathered the equipment at the airport, and Jim and the equipment arrived on the TMM Veracruz just in time. Jim spent the next two weeks deploying XBTs every hour, 24 hours a day.

Congratulations to Anne-Marie Wilburn, Jim Farrington, Craig Engler, and Robert Roddy for accomplishing an impossible mission. Due to their outstanding effort, another successful high density XBT deployment was completed.

(A side note: The total price for this short-notice deployment was actually about the same (not including adrenaline) as previous lines. In the past, the equipment was loaded in Miami (no cost) and a rider would fly to Italy (which allowed for configuration of the equipment before the start of sampling in the Strait of Gibraltar). Airfare to Barcelona, Spain was lower (almost \$1,000 less than previous airfare to Italy), as were the agent fees (\$180 instead of the usual \$500 fee in Italy). The decreased airfare and agent fees offset the increased charges for shipping (\$1,000). Success at no extra cost (aside from antacid!)



"Your mission: Locate a volunteer merchant ship..."



"...ship 1200 lbs. of equipment..."

Miami PIs Help Organize International Meeting

Rik Wanninkhof and Molly Baringer, AOML principal investigators, and Alison Macdonald of the University of Miami's Cooperative Institute of Marine and Atmospheric Science, are members of the JGOFS Organizing Committee that will host a World Ocean Circulation Experiment/Joint Global Ocean Flux Study (WOCE/JGOFS) workshop in Southampton, United Kingdom on June 25-29, 2001.

The international Ocean Transport Workshop will bring together a wide array of experts to synthesize results from both the WOCE and JGOFS programs as they approach their final phases. The WOCE program conducted an unprecedented survey of the global ocean between 1990 and 1998 to make new and improved estimates of the oceanic transports of heat and freshwater (as well as other physical and chemical properties). The JGOFS program collaborated with WOCE to provide additional measurements for new estimates of the storage and transport of carbon.

Workshop attendees will also discuss implementation of new global programs such as CLIVAR (Climate Variability and Predictability), SOLAS (Surface Ocean-Lower Atmosphere Study), and the Carbon Cycle Program.

AOML Diversity Series Presents Professor Okhee Lee University of Miami (Department of Teaching and Learning)

"Science Knowledge and World Views in Social and Cultural Groups: Making Sense After a Hurricane"

June 7, 2001

12 Noon

First-Floor
Conference Room

Terry Nelsen Retires

Terry Nelsen, senior research oceanographer with the Ocean Chemistry Division, retired from federal service on June 1, 2001 after a 30-year career with NOAA. Terry began his employment with NOAA/AOML in 1970 after receiving a master's degree in marine geology from Oregon State University. In 1980, he received a doctoral degree from the University of Miami's Rosenstiel School of Marine and Atmospheric Science in marine geology and geophysics.

Terry's research at AOML in the Marine Geology and Geophysics and Ocean Chemistry Divisions focused on the study of both water column suspended particulate matter and bottom sediments in environments ranging from estuarine to continental shelf/slope/rise seaward to mid-ocean ridge environments. He was part of the original sea-truthing team for the Coastal Zone Color Scanner (CZCS) remote sensing satellite NIMBUS-7 in the mid-1970s. Terry was also a co-discoverer of the first high-temperature hydrothermal vents observed on the Mid-Atlantic Ridge. In addition, his coastal and estuarine work includes the New York Bight Apex, the northern Gulf of Mexico, and the Florida Bay/Everglades regions.

Terry and his wife Wanda will reside in Ashland, Oregon. However, his research with the Ocean Chemistry Division will continue long-distance as a consultant with the University of Miami's Cooperative Institute of Marine and Atmospheric Studies.



NOAA Funding Benefits Students

Alejandra Lorenzo, Computer Networks and Services Division

During Hispanic Heritage Month this past September-October 2000, NOAA's Office of Civil Rights awarded two south Florida senior high schools with funds to promote incentive programs for students at risk. I can now report that the incentive programs implemented at Hialeah Senior High and Miami Senior High were a success. I recently had the privilege of attending award ceremonies at both high schools and was able to observe first hand how the funds NOAA awarded directly impacted the lives of at-risk students.

At Hialeah Senior High, ten \$200 scholarships were awarded to students that demonstrated academic improvement in all areas of study. These students were at risk of dropping out of high school and had very little incentive or desire to stay in school. NOAA's financial commitment made it possible for Hialeah High to develop a program that compelled the students to continue their studies, improve their grades, and be rewarded for their efforts with scholarships that have helped to set them on the path to a more successful future.

Miami Senior High choose to send the top 39 ninth and tenth grade science students to the University of Florida (UF) in Gainesville, Florida for a three-day program that introduced the students to college life. The students were given a tour of the UF campus, met with college students, and attended science classes. These students come from circumstances in which higher education is economically unattainable. Yet, the visit to UF afforded to them by NOAA opened up a new world of possibilities. Miami Senior High also awarded plaques to 13 ESOL (English as a Second Language) students that achieved academic excellence in spite of the language barrier.

The students, teachers, and administrators of Hialeah Senior High and Miami Senior High are grateful. They thank NOAA for its assistance in educating our future leaders.

Hurricane Researcher Travels to France

Robert Rogers, meteorologist with the Hurricane Research Division, has been invited to work as a visiting scientist at the Laboratoire d'Aerologie in Toulouse, France from May 1-October 31, 2001. While in France, Dr. Rogers will work with French colleagues to implement a new technique using airborne Doppler radar wind observations to improve the initialization of tropical cyclones in high-resolution computer models, specifically the model MM5. Dr. Rogers will compare the results of tropical cyclone simulations using the MM5 model with those of the French mesoscale model Meso-NH.



Congratulations to the following individuals who received Year-in-Service certificates for their years of continuous, full-time federal employment at the April 10, 2001 AOML Awards Ceremony:

10 years: *Henry Haynes
Thomas Heeb
Samuel Houston
Ulises Rivero
Emilce Roque-Rodriguez
Jack Stamates
Richard Wanninkhof*

15 years: *Alejandra Lorenzo*

20 years: *David Bitterman
Stanley Goldenberg
Nancy Griffin
Michael Shoemaker*

25 years: *Joseph Griffin
David Palmer
Reyna Sabina*

30 years: *Paul Chinn
Steven Cook
Terry Nelsen*



Alejandra Lorenzo is NOAA's Adventure Club coordinator for the Anheuser-Busch theme parks (SeaWorld, Busch Gardens, Water Country, Discovery Cove, Adventure Island, and Sesame Place). Contact Alejandra (305-361-4404 or Alejandra.Lorenzo@noaa.gov) for information about the Anheuser-Busch theme parks or to obtain Adventure Club membership discount cards. For NOAA employees outside the Miami, Florida area who would like to obtain Adventure Club discount cards, please send Alejandra a written request, along with a self-addressed stamped envelope.

AOML Honors Staff Achievements

AOML staff members gathered this past April 10th to acknowledge and celebrate the achievements of their co-workers. Among those honored at the Awards Ceremony were:

- **Jules Craynock** - In recognition of receiving a NOAA Administrator's Award for his advocacy, dedication, and commitment to Equal Employment Opportunity principles and outreach activities during the last 20 years.

- **Stanley Goldenberg and Christopher Landsea** - In recognition of their receiving Department of Commerce Bronze Medals (as members of a National Weather Service group award) for issuing the accurate and first official physically based Atlantic seasonal hurricane outlooks for the 1998/1999 hurricane seasons, based upon new research.

- **James Hendee** - In recognition of his receiving the OAR 2000 Employee of the Year Award.

- **Kristina Katsaros** - In recognition of her becoming a member of the National Academy of Engineering for her efforts to advance understanding of ocean-atmosphere energy exchange through innovative measurement techniques.

- **Frank Marks** - In recognition of his becoming a Fellow of the American Meteorological Society.

- **Isaac Shafital** - A student intern with the Physical Oceanography Division, in recognition of his reaching the semifinalist round of the national Intel Science Talent Search.

- **Alejandra Lorenzo** - In recognition of her outstanding leadership in guiding the process of updating and restructuring the AOML World-Wide Web Internet computer site.

- **Monika Gurnee, Michael Ha, Lenworth Wilcock, and Robert William** - In recognition of their outstanding efforts to update and improve the structure of AOML's World-Wide Web Internet computer site.

In addition, the following AOML authors (indicated by bolded letters) were honored as recipients of NOAA's Office of Oceanic and Atmospheric Research (OAR) Outstanding Scientific Paper Awards for 2000. The winning publications were selected by a peer review panel composed of 13 OAR scientists. Congratulations to AOML's award-winning authors:

- **Molinari, R.L., R.A. Fine, W.D. Wilson, R.G. Curry, J. Abell, and M.S. McCartney.** The arrival of recently formed Labrador Sea Water in the Deep Western Boundary Current at 26.5°N. *Geophysical Research Letters*, 25(13):2249-2252 (1998).

- **Willoughby, H.E.** Tropical cyclone eye thermodynamics. *Monthly Weather Review*, 126(12):3053-3067 (1998).

- **Feely, R.A., R. Wanninkhof, T. Takahashi, and P. Tans.** Influence of El Niño on the equatorial Pacific contribution to atmospheric CO₂ accumulation. *Nature*, 398:597-601 (1999).



James Hendee, OAR Employee of the Year, is congratulated by AOML Director, Kristina Katsaros.



Michael Shoemaker, Nancy Griffin, and Stanley Goldenberg celebrate 20 years of employment with NOAA.

Frequent Flyer Miles for Stork!

Congratulations to Jennifer Calderon, administrative assistant with the Office of the Director, and her husband Lazaro, on the birth of their first child, a daughter, Lauren Nicole Diaz, born May 9, 2001 at Memorial West Hospital. Lauren Nicole weighed in at a healthy 8 lbs., 12 oz.

Congratulations to Christopher Landsea, meteorologist with the Hurricane Research Division, and his wife, Donna, on the birth of their first child, a son, Mitchell William, born May 22, 2001 at 9:45 a.m. Mitchell William weighed in at a 7 lbs., 12 oz.

Congratulations to Alberto Mestas-Núñez, oceanographer with the Physical Oceanography Division, and his wife, Patricia, on the birth of their fourth child, a daughter, Lucia Andrea, born June 6, 2001 at Baptist Hospital.

Congratulations

Katsuyuki Ooyama, meteorologist with the Hurricane Research Division, was elected to Honorary Membership by the Meteorological Society of Japan's General Assembly on May 9, 2001. Honorary membership is awarded to individuals who have rendered distinguished services to the Society. Throughout its history, the Society has elected only 13 other individuals to honorary membership.

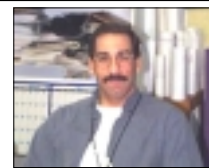
Molly Baringer and Elizabeth Johns, oceanographers with the Physical Oceanography Division, have been appointed as Adjunct Faculty of the Meteorology and Physical Oceanography Division of the University of Miami's Rosenstiel School of Marine and Atmospheric Science.

Nick Carrasco, a computer programmer for the Hurricane Research Division's Surface Wind Analysis Group, graduated from the University of Miami this past May with a bachelor's degree in Computer Engineering. Nick begins graduate school in the fall, also at the University of Miami.

Jessica Redman, a student intern with the Physical Oceanography Division's Drifter Assembly Center, graduated this past May from the University of Miami with a bachelor's degree in Environmental Science.

Farewell

Bret Elkind, a physical scientist with the Remote Sensing Division, resigned from AOML on June 4, 2001. Best of luck to Bret for his continued success.



Team AOML Undaunted by Rain

In spite of soggy conditions caused by thunderstorms in the local Miami area, 34 Team AOML members nevertheless participated in the 2001 Club Med Corporate Run at Bayfront Park on May 3, 2001. They were among some 19,848 registrants representing 643 businesses and companies that competed in the annual 3.1 mile road race. While the spirit of friendly competition prevailed, the NOAA and Team AOML tent was a welcome respite from the rain. All proceeds from the event were donated to the South Florida chapter of the Leukemia and Lymphoma Society.



Team AOML member Armando Cuervo stands beside the NOAA and Team AOML tent before the drenching rains began.

Bring Your Child To Work Day

Erica Van Coverden, AOML Outreach Coordinator

In honor of National "Bring Your Child to Work Day," AOML employees brought their sons and daughters to work en masse on April 26, 2001 to learn something about what their parents do while at work, plus a little lesson in weather.

Fourteen of the children visiting the Lab participated in a special mid-day program to learn about wind and weather. The group even made their own anemometers and tested them outdoors.

Since the beautiful mid-morning conditions yielded no wind, indoor wind simulations allowed students to put their math skills to practice as they calculated the wind speed generated from a fan (see upper right photo). The afternoon concluded with a hot dog and hamburger barbecue luncheon with their parents, a round or two of basketball, and an extra chance to measure the wind speed, as a cold front passed over the Miami area. It was a fun day for all!



Travel

David Enfield participated in the visiting scientist program aboard the Royal Caribbean Cruise Lines ship *Explorer of the Seas* on April 28-5 May 2001.

Oleg Esenkov attended the International Liege Colloquium on Ocean Hydrodynamics in Liege, Belgium on May 7-11, 2001.

Sim Aberson attended a North American Atmospheric Observing System (NAOS) Council Meeting in Washington, D.C. and visited the University of Maryland on May 4-8, 2001.

Kristina Katsaros attended the American Meteorological Society's 11th Conference on the Interaction of the Sea and Atmosphere in San Diego, California on May 14, 2001.

Rik Wanninkhof and Shari Yvon-Lewis attended the U.S. SOLAS (Surface Ocean Lower Atmosphere Study) Planning Meeting in Potomac, Maryland on May 15-18, 2001.

Peter Black and Stanley Goldenberg participated in NOAA's Hurricane Awareness Week program in Washington, D.C. on May 20-22, 2001.

Kelly Goodwin attended the 101st General Meeting of the American Society of Microbiology in Orlando, Florida on May 20-24, 2001.

James Hendee and Michael Shoemaker transported and installed the coral reef monitoring system buoy "Kristina" at Lee Stocking Island, Bahamas on May 21-25, 2001.

Mark Powell attended the 1st Americas Conference on Wind Engineering in Clemson, South Carolina on June 3-6, 2001.

Silvia Garzoli and Chunzai Wang will attend the U.S. CLIVAR (Climate Variability and Predictability Program) Atlantic Meeting in Boulder, Colorado on June 12-14, 2001.

Molly Baringer, Tsung-Hung Peng, and Rik Wanninkhof will attend a JGOFS (Joint Global Ocean Flux Study) Ocean Transport Workshop in Southampton, United Kingdom on June 19-30, 2001.

The Mighty Buoy that Could!

Kristina Katsaros, AOML Director

This is a fairy tale and a love story for your entertainment. The buoy pictured to the right has been in my consciousness all my career. In 1963, it was part of the first cooperative international air-sea interaction experiment, the Indian Ocean Expedition (University of Washington contribution), where it was pulled downwind with an 8 m tower on top instrumented to measure atmospheric profiles of wind and temperature. Under the name *Mentor*, it was designed and built by the Seattle naval architecture firm, Glosten and Associates, Inc. (who also designed the Floating Instrumental Platform, FLIP). *Mentor* was later used for teaching air-sea interaction in the 1960s and early 1970s, and then languished in a storage yard buried under blackberry bushes for about 15 years. In 1991, I revived it and had it refurbished for experiments in the mid-Atlantic Ocean, the SOFIA (Surface of the Ocean, Fluxes and Interactions with the Atmosphere) in 1992 and the SEMAPHORE (Structure of Exchanges with the Marine Atmosphere, Properties of Heterogeneities of the Ocean and their Repartition) in 1993. During SEMAPHORE, a storm destroyed *Mentor's* instruments and 12-m long stabilizer column. By a miracle, *Mentor* was found a month later by a French Navy supply ship and brought to France. I had it shipped to Norway, where I had planned new duties for it. *Mentor* then accompanied me to Miami, by now, my personally-owned buoy, off all records. It was proffered to colleagues at the Atlantic Oceanographic and Meteorological Laboratory, and it appears that this faithful old buoy now has a new life as a link in the chain of coral reef monitoring sites around the world under the new name R/V *Kristina* (not my idea, but I like it!). We have shared so much that I have a certain affinity for this buoy and am proud that "she" will carry my name. As the Portuguese sailors who helped me set her adrift south of San Miguel Island in the Azores sang as we left her out in the ocean all alone, "Vaya con Dios, my darling." You've done well, and I wish you many more years of useful service!



The freshly painted and instrumented R/V *Kristina*, ready for sea duty once again.



The team that outfitted the R/V *Kristina* for sea duty included (left to right) Lloyd Moore, Peter Ortner, Michael Shoemaker, James Hendee (Kristina Katsaros), and Isaac "Skeet" Perry.

Keynotes can be viewed online in PDF format at the following
World-Wide Web Internet address:
<http://www.aoml.noaa.gov/keynotes>

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